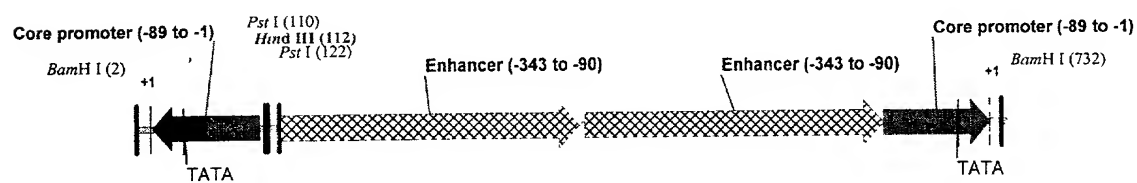


Fig. 1



BDPC with 2 enhancers based on CaMV 35S promoter
 736 bp

FIG. 2



BamHI

1 GGATCCAGCG TGTCTCTCC AAATGAAATG AACTTCCTTA TATAGAGGAA GGTCTTGCG AAGGATAGTG GGATTGTGCG
CCTAGGTCG ACAGGAGAGG TTTACTTTAC TTGAAGGAAT ATATCTCCTT CCCAGAACGC TTCCTATCAC CCTAACACGC

PstI HindIII PstI

81 TCATCCCTTA CGTCAGTGGA GATACTGCAG AAGCTTCTGC AGTGAGACTT TTCAACAAAG GGTAATATCG GGAAACCTCC
AGTAGGGAAT GCAGTCACCT CTATGACGTC TTCGAAGACG TCACTCTGAA AAGTTGTTTC CCATTATAGC CCTTTGGAGG

161 TCGGATTCCA TTGCCCAGCT ATCTGTCACT TCATCAAAAG GACAGTAGAA AAGGAAGGTG GCACCTACAA ATGCCATCAT
AGCCTAAGGT AACGGGTCGA TAGACAGTGA AGTAGTTTTT CTGTCATCTT TTCCTTCCAC CGTGGATGTT TACGGTAGTA

241 TGCATAAAG GAAAGGCTAT CGTTCAAGAT GCCTCTGCCG ACAGTGGTCC CAAAGATGGA CCCCCACCCA CGAGGAGCAT
ACGCTATTTT CTTTCCGATA GCAAGTTCTA CGGAGACGGC TGTCACCAGG GTTCTACCT GGGGGTGGGT GCTCCTCGTA

321 CGTGGAAAAA GAAGACGTTT CAACCACGTC TTCAAAGCAA GTGGATTGAT GTGATTGCAG TGAGACTTTT CAACAAAGGG
GCACCTTTTT CTTCTGCAAG GTTGGTGCAG AAGTTTCGTT CACCTAACTA CACTAACGTC ACTCTGAAAA GTTGTTCCTC

401 TAATATCGGG AAACCTCCTC GGATTCCATT GCCAGCTAT CTGTCACTTC ATCAAAGGA CAGTAGAAAA GGAAGGTGGC
ATTATAGCCC TTTGGAGGAG CCTAAGGTAA CGGGTCGATA GACAGTGAAG TAGTTTCCT GTCATCTTTT CCTTCCACCG

481 ACCTACAAAT GCCATCATTG CGATAAAGGA AAGGCTATCG TTCAAGATGC CTCTGCCGAC AGTGGTCCCA AAGATGGACC
TGGATGTTTA CGGTAGTAAC GCTATTTCTT TTCCGATAGC AAGTTCTACG GAGACGGCTG TCACCAGGGT TTCTACCTGG

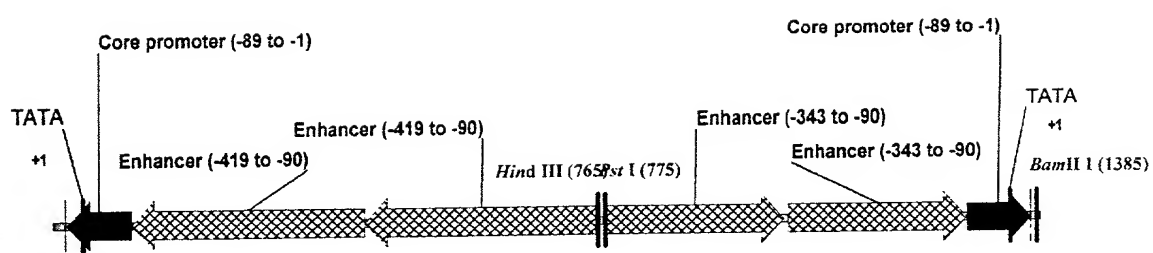
561 CCCACCCACG AGGAGCATCG TGGAAAAAGA AGACGTTCCA ACCACGTCTT CAAAGCAAGT GGATTGATGT GATATCTCCA
GGGTGGGTGC TCCTCGTAGC ACCTTTTCT TCTGCAAGGT TGGTGCAGAA GTTTCGTTCA CCTAACTACA CTATAGAGGT

641 CTGACGTAAG GGATGACGCA CAATCCCACT ATCCTTCGCA AGACCTTCC TCTATATAAG GAAGTTCATT TCATTGGAG
GACTGCATTG CCTACTGCGT GTTAGGGTGA TAGGAAGCGT TCTGGGAAGG AGATATATTC CTTCAAGTAA AGTAAACCTC

BamHI

721 AGGACACGCT GGATCC Seq. ID No. 1
TCCTGTGCGA CCTAGG Seq. ID No. 2

Fig. 3



BDPC with 4 enhancers based on CaMV 35S promoter

1389 bp

2025-05-10 10:07:10

FIG. 4

SnaBI

Seq. ID No. 3 1 TACGTACAGC GTGTCCTCTC CAAATGAAAT GAACTTCCTT ATATAGAGGA AGGGTCTTGC GAAGGATAGT GGGATTGTGC
 Seq. ID No. 4 ATGCATGTCG CACAGGAGAG GTTTACTTTA CTTGAAGGAA TATATCTCCT TCCCAGAACG CTTCTATCA CCCTAACACG

81 GTCATCCCTT ACGTCAGTGG AGATATCACA TCAATCCACT TGCTTTGAAG ACGTGTTGG AACGTCTTCT TTTCCACGA
 CAGTAGGGAA TGCAGTCACC TCTATAGTGT AGTTAGGTGA ACGAACTTC TGCACCAACC TTGCAGAAGA AAAAGGTGCT

161 TGCTCCTCGT GGGTGGGGGT CCACTTTTGG GACCACTGTC GGCAGAGGCA TCTTCAACGA TGGCCTTTCC TTTATCGCAA
 ACGAGGAGCA CCCACCCCA GGTAGAAACC CTGGTGACAG CCGTCTCCGT AGAAGTTGCT ACCGGAAGG AAATAGCGTT

241 TGATGGCATT TGTAGGAGCC ACCTTCCTTT TCCACTATCT TCACAATAAA GTGACAGATA GCTGGGCAAT GGAATCCGAG
 ACTACCGTAA ACATCCTCGG TGAAGGAAA AGGTGATAGA AGTGTTATTT CACTGTCTAT CGACCCGTTA CCTTAGGCTC

321 GAGGTTTCCG GATATTACCC TTTGTTGAAA AGTCTCAATT GCCCTTTGGT CTTCTGAGAC TGTATCTTTG ATATTTTGG
 CTCAAAGGC CTATAATGGG AAACAACCTT TCAGAGTTAA CGGGAAACCA GAAGACTCTG ACATAGAAAC TATAAAAACC

401 AGTAGACAAG TGTGTCGTGC TCCACCATGT TGATTCACAT CAATCCACTT GCTTTGAAGA CGTGGTTGGA ACGTCTTCTT
 TCATCTGTTT ACACAGCAGC AGGTGGTACA ACTAAGTGTA GTTAGGTGAA CGAACTTCT GCACCAACCT TGCAGAAGAA

481 TTTCCACGAT GCTCCTCGTG GGTGGGGTGC CATCTTTGGG ACCACTGTCG GCAGAGGCAT CTTCAACGAT GGCCTTTCCT
 AAAGGTGCTA CGAGGAGCAC CCACCCCGAG GTAGAAACCC TGGTGACAGC CGTCTCCGTA GAAGTTGCTA CCGGAAAGGA

561 TTATCGCAAT GATGGCATT GTAGGAGCCA CCTTCCTTTT CCACTATCTT CACAATAAAG TGACAGATAG CTGGGCAATG
 AATAGCGTTA CTACCGTAAA CATCTCGGT GGAAGGAAA GGTGATAGAA GTGTTATTTT ACTGTCTATC GACCCGTTAC

641 GAATCCGAGG AGGTTTCCGG ATATTACCTT TTGTTGAAAA GTCTCAATTG CCCTTTGGTC TTCTGAGACT GTATCTTTGA
 CTTAGGCTCC TCCAAAGGCC TATAATGGGA AACAACCTTT CAGAGTTAAC GGGAAACCAG AAGACTCTGA CATAGAACT

HindIIIPstI

721 TATTTTGGGA GTAGACAAGT GTGTCGTGCT CCACCATGTT GATAAGCTTC TGCACTGAGA CTTTCAACA AAGGGTAATA
 AAAAAACCT CATCTGTTCA CACAGCACGA GGTGGTACAA CTATTCGAAG ACGTCACTCT GAAAAGTTGT TTCCATTAT

801 TCGGGAAACC TCCTCGGATT CCATTGCCCA GCTATCTGTC ACTTCATCAA AAGGACAGTA GAAAAGGAAG GTGGCACCTA
 AGCCCTTTGG AGGAGCCTAA GGTAACGGGT CGATAGACAG TGAAGTAGTT TTCCTGTCAT CTTTCTCTC CACCGTGGAT

881 CAAATGCCAT CATTGCGATA AAGGAAAGGC TATCGTTCAA GATGCCTCTG CCGACAGTGG TCCCAAAGAT GGACCCCGAC
 GTTTACGGTA GTAACGCTAT TTCCTTTCCG ATAGCAAGTT CTACGGAGAC GGCTGTCACC AGGGTTTCTA CCTGGGGGTG

961 CCACGAGGAG CATCGTGGAA AAAGAAGACG TTCCAACCAC GTCTTCAAAG CAAGTGGATT GATGTGATTG CAGTGAGACT
 GGTGCTCCTC GTAGCACCTT TTTCTTCTGC AAGGTGGTG CAGAAGTTT GTTCACCTAA CTACACTAAC GTCACCTCTG

1041 TTTCAACAAA GGGTAATATC GGGAAACCTC CTCGGATTCC ATTGCCAGC TATCTGTCAC TTCATCAAAA GGACAGTAGA
 AAAGTTGTTT CCCATTATAG CCCTTTGGAG GAGCCTAAGG TAACGGGTCG ATAGACAGTG AAGTAGTTTT CCTGTCATCT

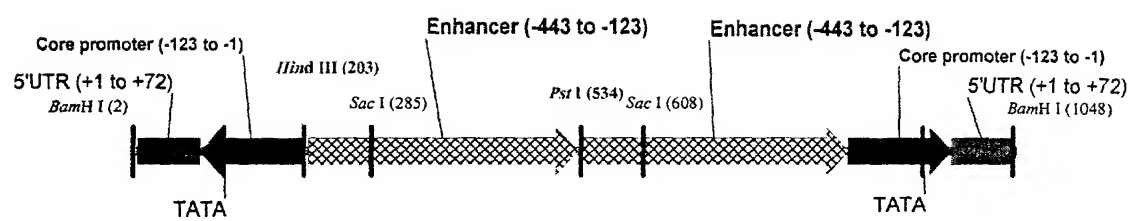
1121 AAAGGAAGGT GGCACCTACA AATGCCATCA TTGCGATAAA GGAAAGGCTA TCGTTCAAGA TGCTCTGACC GACAGTGGTC
 TTTCTTCCA CCGTGGATGT TTACGGTAGT AACGCTATTT CTTTCCGAT AGCAAGTTCT ACGGAGACGG CTGTACCAG

1201 CCAAAGATGG ACCCCACCC ACGAGGAGCA TCGTGGAAAA AGAAGACGTT CCAACCACGT CTTCAAAGCA AGTGGATTGA
 GGTCTTACC TGGGGGTGGG TGCTCCTCGT AGCACCTTT TCTTCTGCAA GGTGGTGCA GAAGTTTCGT TCACCTAACT

1281 TGTGATATCT CCACTGACGT AAGGGATGAC GCACAATCCC ACTATCCTTC GCAAGACCCT TCCTCTATAT AAGGAAGTTC
 AACTATAGA GGTGACTGCA TTCCCTACTG CGTGTTAGGG TGATAGGAAG CGTCTGGGA AGGAGATATA TTCCTTCAAG

20250520

Fig. 5



BDPC with 2 enhancers based on CsVMV promoter

1052 bp

2025-03-20 14:00:00

Fig. 6

BamHI

1 GGATCCACAA ACTTACAAAT TTCTCTGAAG TTGTATCCTC AGTACTTCAA AGAAAATAGC TTACACCAAA TTTTCTTCTG
CCTAGGTGTT TGAATGTTTA AAGAGACTTC AACATAGGAG TCATGAAGTT TCTTTTATCG AATGTGGTTT AAAAAAGAAC

81 TTTTCACAAA TGCCGAACCT GGTTCCTTAT ATAGGAAAAC TCAAGGGCAA AAATGACACG GAAAAATATA AAAGGATAAG
AAAAGTGTTT ACGGCTTGAA CCAAGGAATA TATCCTTTTG AGTTCCCGTT TTTACTGTGC CTTTTTATAT TTTCTATTTC

HindIII

161 TAGTGGGGGA TAAGATTCCT TTGTGATAAG GTTACTTTCC GAAGCTTCCA GAAGGTAATT ATCCAAGATG TAGCATCAAG
ATCACCCTT ATTCTAAGGA AACACTATTTC CAATGAAAGG CTTCGAAGGT CTTCCATTAA TAGGTTCTAC ATCGTAGTTC

SacI

241 AATCCAATGT TTACGGGAAA AACTATGGAA GTATTATGTG AGCTCAGCAA GAAGCAGATC AATATGCGGC ACATATGCAA
TTAGGTTACA AATGCCCTTT TTGATACCTT CATAATACAC TCGAGTCGTT CTTCTGTCTAG TTATACGCCG TGTATACGTT

321 CCTATGTTCA AAAATGAAGA ATGTACAGAT ACAAGATCCT ATACTGCCAG AATACGAAGA AGAATACGTA GAAATTGAAA
GGATACAAGT TTTTACTTCT TACATGTCTA TGTCTAGGA TATGACGGTC TTATGCTTCT TCTTATGCAT CTTTAACTTT

401 AAGAAGAACC AGGCGAAGAA AAGAATCTTG AAGACGTAAG CACTGACGAC AACAATGAAA AGAAGAAGAT AAGGTCGGTG
TTCTTCTTGG TCCGCTTCTT TTCTTAGAAC TTCTGCATTTC GTGACTGCTG TTGTTACTTT TCTTCTTCTA TTCCAGCCAC

PstI

481 ATTGTGAAAG AGACATAGAG GACACATGTA AGGTGGAAAA TGTAAGGGCT GCAGAAGGTA ATTATCCAAG ATGTAGCATC
TAACACTTTC TCTGTATCTC CTGTGTACAT TCCACCTTTT ACATTCCCGA CGTCTTCCAT TAATAGGTTT TACATCGTAG

SacI

561 AAGAATCCAA TGTTTACGGG AAAAATATG GAAGTATTAT GTGAGCTCAG CAAGAAGCAG ATCAATATGC GGCACATATG
TTCTTAGGTT ACAAATGCCC TTTTGTATAC CTTTATAATA CACTCGAGTC GTTCTTCGTC TAGTTATACG CCGTGTATAC

641 CAACCTATGT TCAAAAATGA AGAATGTACA GATACAAGAT CCTATACTGC CAGAATACGA AGAAGAATAC GTAGAAATTG
GTTGGATACA AGTTTTTACT TCTTACATGT CTATGTTCTA GGATATGACG GTCTTATGCT TCTTCTTATG CATCTTTAAC

721 AAAAAGAAGA ACCAGGCGAA GAAAAGAATC TTGAAGACGT AAGCACTGAC GACAACAATG AAAAGAAGAA GATAAGGTCG
TTTTTCTTCT TGGTCCGCTT CTTTTCTTAG AACTTCTGCA TCGTGACTG CTGTTGTTAC TTTTCTTCTT CTATTCCAGC

801 GTGATTGTGA AAGAGACATA GAGGACACAT GTAAGGTGGA AAATGTAAGG GCGGAAAGTA ACCTTATCAC AAAGGAATCT
CACTAACACT TTCTCTGTAT CTCCTGTGTA CATTCCACCT TTTACATTCC CGCCTTTCAT TGGAATAGTG TTTCTTAGA

881 TATCCCCCAC TACTTATCCT TTTATATTTT TCCGTGTCAT TTTTGGCCTT GAGTTTTCTT ATATAAGGAA CCAAGTTCGG
ATAGGGGGTG ATGAATAGGA AAATATAAAA AGGCACAGTA AAAACGGGAA CTCAAAGGA TATATTCTT GGTTCAGCC

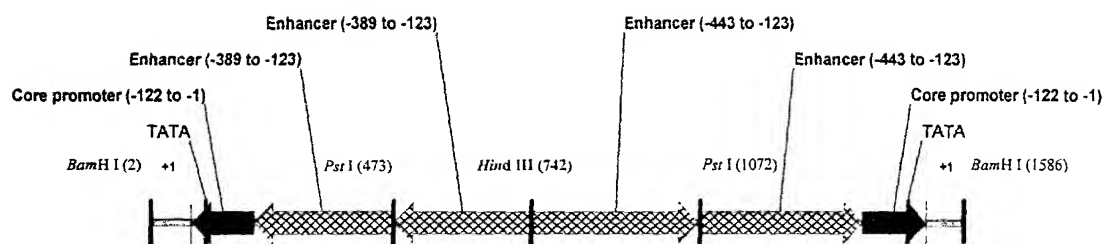
961 CATTTGTGAA AACAAGAAAA AATTGGGTGT AAGCTATTTT CTTTGAAGTA CTGAGGATAC AACTTCAGAG AAATTTGTAA
GTAAACACTT TTGTTCTTTT TTAAACCACA TTGATAAAA GAACTTCAT GACTCCTATG TTGAAGTCTC TTTAAACATT

BamHI

1041 GTTTGTGGAT CC Seq. ID No. 5
CAAACACCTA GG Seq. ID No. 6

1005105 021302

Fig. 7



BDPC with 4 enhancers based on CsVMV promoter
1590 bp

FIG. 8

BamHI

1 GGATCCACAA ACTTACAAAT TTCTCTGAAG TTGTATCCTC AGTACTTCAA AGAAAATAGC TTACACCAAA TTTTCTCTTG
CCTAGGTGTT TGAATGTTTA AAGAGACTTC AACATAGGAG TCATGAAGTT TCTTTTATCG AATGTGGTTT AAAAAAGAAC

81 TTTTCACAAA TGCCGAACCT GGTTCCTTAT ATAGGAAAAC TCAAGGGCAA AAATGACACG GAAAAATATA AAAGGATAAG
AAAAGTGTTT ACGGCTTGAA CCAAGGAATA TATCCTTTTG AGTTCCCGTT TTTACTGTGC CTTTTTATAT TTTCTATTTC

161 TAGTGGGGGA TAAGATTCTT TTGTGATAAG GTTACTTTCC GCCCTTACAT TTTCCACCTT ACATGTGTCC TCTATGTCTC
ATCACCCTCT ATTCTAAGGA AACACTATTTC CAATGAAAGG CGGGAATGTA AAAGGTGGAA TGTACACAGG AGATACAGAG

241 TTTTACAATC ACCGACCTTA TCTTCTCTTT TTCATTGTTG TCGTCAGTGC TTACGTCTTC AAGATTCTTT TCTTCGCCTG
AAAGTGTTAG TGGCTGGAAT AGAAGAAGAA AAGTAACAAC AGCAGTCACG AATGCAGAAG TTCTAAGAAA AGAAGCGGAC

321 GTTCTTCTTT TTCAATTTCT ACGTATTCTT CTTCTGATTTC TCGCAGTATA GGATCTTGTA TCTGTACATT CTTCAATTTT
CAAGAAGAAA AAGTTAAAGA TGCATAAGAA GAAGCATAAG ACCGTCATAT CCTAGAACAT AGACATGTAA GAAGTAAAAA

401 GAACATAGGT TGCATATGTG CCGCATATTG ATCTGCTTCT TGCTGAGCTC ACATAATACT TCCATAGCTG CAGCCCTTAC
CTTGTATCCA ACGTATACAC GCGGTATAAC TAGACGAAGA ACGACTCGAG TGTATTATGA AGGTATCGAC GTCGGGAATG

481 ATTTTCCACC TTACATGTGT CCTCTATGTC TCTTTACAAA TCACCGACCT TATCTTCTTC TTTTCATTGT TGTCGTCAGT
TAAAAGGTGG AATGTACACA GGAGATACAG AGAAAGTGTT AGTGGCTGGA ATAGAAGAAG AAAAGTAACA ACAGCAGTCA

561 GCTTACGTCT TCAAGATTCT TTTCTTCGCC TGGTTCTTCT TTTTCAATTT CTACGTATTC TTCTTCGTAT TCTGGCAGTA
CGAATGCAGA AGTTCTAAGA AAAGAAGCGG ACCAAGAAGA AAAAGTTAAA GATGCATAAG AAGAAGCATA AGACCGTCAT

641 TAGGATCTTG TATCTGTACA TTCTTCATTT TTGAACATAG GTTGCATATG TGCCGCATAT TGATCTGCTT CTTGCTGAGC
ATCCTAGAAC ATAGACATGT AAGAAGTAAA AACTTGTATC CAACGTATAC ACGGCGTATA ACTAGACGAA GAACGACTCG

721 TCACATAATA CTTCCATAGG AAGCTTCAGA AGGTAATTAT CCAAGATGTA GCATCAAGAA TCCAATGTTT ACGGGAAAAA
AGTGTATTAT GAAGGTATCC TTCGAAGTCT TCCATTAATA GGTCTACAT CGTAGTTCTT AGGTACAAA TGCCCTTTTT

801 CTATGGAAGT ATTATGTGAG CTCAGCAAGA AGCAGATCAA TATGCGGCAC ATATGCAACC TATGTTCAAA AATGAAGAAT
GATACCTTCA TAATACACTC GAGTCGTTCT TCGTCTAGTT ATACGCCGTG TATACGTTGG ATACAAGTTT TTACTTCTTA

881 GTACAGATAC AAGATCCTAT ACTGCCAGAA TACGAAGAAG AATACGTAGA AATTGAAAAA GAAGAACCAG GCGAAGAAAA
CATGTCTATG TTCTAGGATA TGACGGTCTT ATGCTTCTTC TTATGCATCT TTAACTTTTT CTTCTTGGTC CGCTTCTTTT

961 GAATCTTGAA GACGTAAGCA CTGACGACAA CAATGAAAAG AAGAAGATAA GGTGCGTGAT TGTGAAAGAG ACATAGAGGA
CTTAGAATT CTGCATTCTG GACTGCTGTT GTTACTTTTC TTCTTCTATT CCAGCCACTA ACACCTTCTC TGTATCTCTT

1041 CACATGTAAG GTGGAAAATG TAAGGGCTGC AGAAGGTAAT TATCCAAGAT GTAGCATCAA GAATCCAATG TTTACGGGAA
GTGTACATTC CACCTTTTAC ATTCCCGACG TCTTCCATTA ATAGGTTCTA CATCGTAGTT CTTAGGTTAC AAATGCCCTT

1121 AAACATGGA AGTATTATGT GAGCTCAGCA AGAAGCAGAT CAATATGCGG CACATATGCA ACCTATGTTT AAAAATGAAG
TTTGATACCT TCATAATACA CTCGAGTCGT TCTTCGTCTA GTTATACGCC GTGTATACGT TGGATACAAG TTTTACTTTC

1201 AATGTACAGA TACAAGATCC TATACTGCCA GAATACGAAG AAGAATACGT AGAAATTGAA AAAGAAGAAC CAGGCGAAGA
TTACATGTCT ATGTTCTAGG ATATGACGGT CTTATGCTTC TTCTTATGCA TCTTTAACTT TTTCTTCTTG GTCCGCTTCT

1281 AAAGAATCTT GAAGACGTAA GCACTGACGA CAACAATGAA AAGAAGAAGA TAAGGTCGGT GATTGTGAAA GAGACATAGA
TTTCTTAGAA CTTCTGCATT CGTGA CTGCT GTTGT TACTT TTCTTCTTCT ATTCCAGCCA CTAACACTTT CTCTGTATCT

1361 GGACACATGT AAGGTGGAAA ATGTAAGGGC GGAAAGTAAC CTTATCACAA AGGAATCTTA TCCCCACTA CTTATCCTTT
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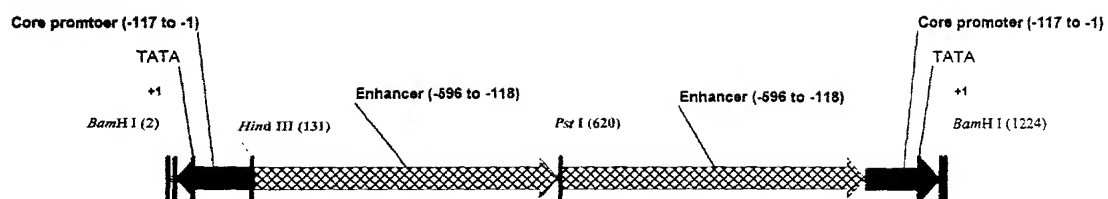
1441 TATATTTTTT CGTGTCATTT TTGCCCTTGA GTTTTCTTAT ATAAGGAACC AAGTTCGGCA TTTGTGAAAA CAAGAAAAAA
ATATAAAAAG GCACAGTAAA AACGGGAAC CAAAAGGATA TATTCCTTGG TTCAAGCCGT AAACACTTTT GTTCTTTTTT

BamHI

1521 TTTGGTGTA GCTATTTTCT TTGAAGTACT GAGGATACAA CTTAGAGAA ATTTGTAAGT TTGTGGATCC Seq. ID No. 7
AAACCACATT CGATAAAGA AACTTCATGA CTCCTATGTT GAAGTCTCTT TAAACATTCA AACACCTAGG Seq. ID No. 8

20251015 021302

Fig. 9



BDPC with 2 enhancers based on ACT2 promoter

1228 bp

FIG. 10

BamHI

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1 GGATCCTTGT TTTCAAAGCG GAGAGGAAAA TATATGAATT TATATAGGCG GGTTCATCTC TTACAACTTT ATTTTCGGCC  
CCTAGGAACA AAAGTTTCGC CTCTCCTTTT ATATACTTAA ATATATCCGC CCAAATAGAG AATGTTGAAA TAAAAGCCGG

HindIII

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81 TTTCAAAAAA ATAATTAAAA TCGACAGACA CGAATCATTT CGACCACAGA AGCTTCAACT ATTTTATGT ATGCAAGAGT
AAAGTTTTTT TATTAATTTT AGCTGTCTGT GCTTAGTAAA GCTGGTGTCT TCGAAGTTGA TAAAAATACA TACGTTCTCA

161 CAGCATATGT ATAATTGATT CAGAATCGTT TTGACGAGTT CGGATGTAGT AGTAGCCATT ATTTAATGTA CATACTAATC
GTCGTATACA TATTAACATA GTCTTAGCAA AACTGCTCAA GCCTACATCA TCATCGGTAA TAAATTACAT GTATGATTAG

241 GTGAATAGTG ATATGATGAA ACATTGTATC TTATTGTATA AATATCCATA AACACATCAT GAAAGACACT TTCTTTCACG
CACTTATCAC TATACTACTT TGTAACATAG AATAACATAT TTATAGGTAT TTGTGTAGTA CTTTCTGTGA AAGAAAGTGC

321 GTCTGAATTA ATTATGATAC AATTCTAATA GAAAACGAAT TAAATTACGT TGAATTGTAT GAAATCTAAT TGAACAAGCC
CAGACTTAAT TAATACTATG TTAAGATTAT CTTTTGCTTA ATTTAATGCA ACTTAACATA CTTTAGATTA ACTTGTTCGG

401 AACCACGACG ACGACTAACG TTGCCTGGAT TGAATCGGTT TAAGTTAACC ACTAAAAAAA CGGAGCTGTC ATGTAACACG
TTGGTGCTGC TGCTGATTGC AACGGACCTA ACTGAGCCAA ATTCAATTGG TGATTTTTTT GCCTCGACAG TACATTGTGC

481 CGGATCGAGC AGGTCACAGT CATGAAGCCA TCAAAGCAAA AGAACTAATC CAAGGGCTGA GATGATTAAT TAGTTTTAAA
GCCTAGCTCG TCCAGTGTCG GTACTTCGGT AGTTTCGTTT TCTTGATTAG GTTCCCGACT CTACTAATTA ATCAAATTTT

PstI

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561 ATTAGTTAAC ACGAGGGAAA AGGCTGTCTG ACAGCCAGGT CACGTTATCT TTACCTGCAG CAACTATTTT TATGTATGCA  
TAATCAATTG TGCTCCCTTT TCCGACAGAC TGTCGGTCCA GTGCAATAGA AATGGACGTC GTTGATAAAA ATACATACGT

641 AGAGTCAGCA TATGTATAAT TGATTCAGAA TCGTTTTGAC GAGTTCGGAT GTAGTAGTAG CCATTATTTA ATGTACATAC  
TCTCAGTCGT ATACATATTA ACTAAGTCTT AGCAAAACTG CTCAAGCCTA CATCATCATC GGTAATAAAT TACATGTATG

721 TAATCGTGAA TAGTGATATG ATGAAACATT GTATCTTATT GTATAAATAT CCATAAACAC ATCATGAAAG AACTTTCTT  
ATTAGCACTT ATCACTATAC TACTTTGTAA CATAGAATAA CATATTTATA GGTATTTGTG TAGTACTTTC TGTGAAAGAA

801 TCACGGTCTG AATTAATTAT GATACAATTC TAATAGAAAA CGAATTAAAT TACGTTGAAT TGTATGAAAT CTAATTGAAC  
AGTGCCAGAC TTAATTAATA CTATGTTAAG ATTATCTTTT GCTTAATTTA ATGCAACTTA ACATACTTTA GATTAACCTG

881 AAGCCAACCA CGACGACGAC TAACGTTGCC TGGATTGACT CGGTTTAAGT TAACCACTAA AAAACGGAG CTGTCATGTA  
TTCGGTTGGT GCTGCTGCTG ATTGCAACGG ACCTAAGTGA GCCAAATTCA ATTGGTGATT TTTTGCCTC GACAGTACAT

961 ACACGCGGAT CGAGCAGGTC ACAGTCATGA AGCCATCAAA GCAAAAGAAC TAATCCAAGG GCTGAGATGA TTAATTAGTT  
TGTGCGCCTA GCTCGTCCAG TGTCAGTACT TCGGTAGTTT CGTTTCTTG ATTAGGTTCC CGACTCTACT AATTAATCAA

1041 TAAAAATTAG TTAACACGAG GGAAAAGGCT GTCTGACAGC CAGGTCACGT TATCTTTACC TGTGGTCGAA ATGATTCTGT  
ATTTTAAATC AATTGTGCTC CCTTTTCCGA CAGACTGTCT GTCCAGTGCA ATAGAAATGG ACACCAGCTT TACTAAGCAC

1121 TCTGTGATT TTAATTATTT TTTTGAAAGG CCGAAAATAA AGTTGTAAGA GATAAACCCG CCTATATAAA TTCATATATT  
AGACAGCTAA AATTAATAAA AAAACTTTCC GGCTTTTATT TCAACATTCT CTATTTGGGC GGATATATTT AAGTATATAA

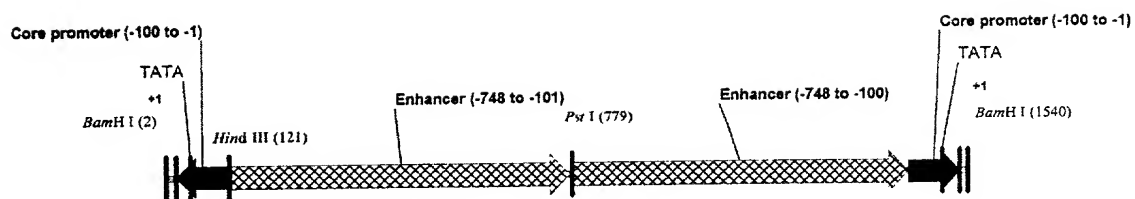
BamHI

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1201 TTCCTCTCCG CTTTGAAAAC AAGGATCC Seq. ID No. 9
AAGGAGAGGC GAAACTTTTG TTCCTAGG Seq. ID No. 10

2005052001

Fig. 11



BDPC with 2 enhancers based on PR1b promoter of tobacco
1544 bp

FIG. 12

BamHI

1 GGATCCTTTT GGGTTTTGGT GAGAAACAAG GAATAGTATG GATGGGTTTT AATAGGGAAT AAGAGTTGAA AAGTCTGCAA
CCTAGGAAAA CCCAAAACCA CTCCTTGTTT CTTATCATAC CTACCCAAAA TTATCCCTTA TTCTCAACTT TTCAGACGTT

HindIII

81 TTTGTAAAG AAAAAAATTG GAAAGTCACA TGTTAGCAGA AGCTTCAGAC TCATTAACCT AAAAGAAGAT ATAGACTCAT
AAACATTTTC TTTTITTAAC CTTTCAGTGT ACAATCGTCT TCGAAGTCTG AGTAATTGAA TTTTCTTCTA TATCTGAGTA

161 TAACCTAAAA GAAGATATAG ATTCCAACAC AAGTTCAAAA TTCATAAACG TCAATCTTGG CTAAATTTCT GAACATCAAT
ATTGAATTTT CTTCTATATC TAAGGTTGTG TTCAAGTTTT AAGTATTGTC AGTTAGAACC GATTAAAGA CTGTAGTTA

241 GCATTCCTTT AAAATATAGA TAATAAGTTA GGATGTTGTC ACTTTCTTAA AGCATATTCC GACTGAGTCT GGTAGAATCT
CGTAAGGAAA TTTTATATCT ATTATTCAAT CCTACAACAG TGAAAGAATT TCGTATAAGG CTGACTCAGA CCATCTTAGA

321 CATAAACTTT AGGCCTTATC TCTTCAATTA GGCAATTACT TACCTCCGCT CTACTTTAAG AAAATTCAAT GGAGTACACC
GTATTTGAAA TCCGGAATAG AGAAGTTAAT CCGTTAATGA ATGGAGGCGA GATGAAATTC TTTTAAGTTA CCTCATGTGG

401 ATTATTAAGT TCATATAAAA ATAAAATTAT ATTAATTCTG TCTCTTGTG GTTCGCTCTA TCTTTTTCTG TTTTCTGCT
TAATAATTCA AGTATATTTT TATTTTAATA TAATTAAGAC AGAGAACAAC CAAGCGAGAT AGAAAAAGAC AAAAGGACGA

481 TCAACCATAA CATATACAAG AACTACATTT TCCAAGCTAG ATATATCTAA CATGACTGAC TTTGTAAATT TCTTTTGCCA
AGTTGGTATT GTATATGTTT TTGATGTAAA AGGTTGATC TATATAGATT GTACTGACTG AAACATTTAA AGAAAACGGT

561 AGTTAAAGAA AAAAAATGAT GTTATCCAAA TAATAAGAG AAAGAGCCCT AATGAAAAAA ATGATTTACT ATTAGAGTTG
TCAATTTCTT TTTTITTAATA CAATAGGTTT ATTATTCTC TTTCTCGGGA TTACTTTTTT TACTAAATGA TAATCTCAAC

641 TTCAGCTAAT CACATCAATT ATGGTTTTCA TCAAGTATGA CTAATGGCGG CTCTTATCTC ACGTGATGTG ACATTGAAAT
AAGTCGATTA GTGTAGTTAA TACCAAAAGT AGTTCATACT GATTACCGCC GAGAATAGAG TGCACATAC TGTAACCTTA

PstI

721 TCTTTGACTT TAACACTAAT GTCATATGCT TTCAAATTAA TAATCCGATA AAGCTGCAGA CTCATTAACCT TAAAAGAAGA
AGAAACTGAA ATTGTGATTA CAGTATACGA AAGTTTAAAT ATTAGGCTAT TTCGACGTCT GAGTAATTGA ATTTTCTTCT

801 TATAGACTCA TTAACCTAAA AGAAGATATA GATTCCAACA CAAGTTCAAA ATTCATAAAC GTCAATCTTG GCTAAATTTT
ATATCTGAGT AATTGAATTT TCTTCTATAT CTAAGGTTGT GTTCAAGTTT TAAGTATTTG CAGTTAGAAC CGATTAAAG

881 TGAACATCAA TGCATTCCTT TAAAATATAG ATAATAAGTT AGGATGTTGT CACTTTCTTA AAGCATATTC CGACTGAGTC
ACTTGTAGTT ACGTAAGGAA ATTTTATATC TATTATTCAA TCCTACAACA GTGAAAGAAT TTCGTATAAG GCTGACTCAG

961 TGGTAGAATC TCATAAACTT TAGGCCTTAT CTCTTCAATT AGGCAATTAC TTACCTCCGC TCTACTTTAA GAAAATTCAA
ACCATCTTAG AGTATTTGAA ATCCGGAATA GAGAAGTTAA TCCGTTAATG AATGGAGGCG AGATGAAATT CTTTAAAGTT

1041 TGGAGTACAC CATTATTAAG TTCATATAAA AATAAATTA TATTAATTCT GTCTCTTGTI GGTTGCTCT ATCTTTTCT
ACCTCATGTG GTAATAATTC AAGTATATTT TTATTTTAAAT ATAATTAAGA CAGAGAACA CCAAGCGAGA TAGAAAAAGA

1121 GTTTTCTGCT TTCAACCATA ACATATACAA GAACTACATT TTCCAAGCTA GATATATCTA ACATGACTGA CTTGTAAAT
CAAAAGGACG AAGTTGGTAT TGTATATGTT CTTGATGTAA AAGGTTGAT CTATATAGAT TGTACTGACT GAAACATTTA

1201 TTCTTTTGCC AAGTTAAAGA AAAAAATGA TGTTATCCAA ATAATAAGA GAAAGAGCCC TAATGAAAAA AATGATTTAC
AAGAAAACGG TTCAATTTCT TTTTITTAATA ACAATAGGTT TATTATTTCT CTTTCTCGGG ATTACTTTTT TACTAAATG

1281 TATTAGAGTT GTTCAGCTAA TCACATCAAT TATGGTTTTT ATCAAGTATG ACTAATGGCG GCTCTTATCT CACGTGATGT
ATAATCTCAA CAAGTCGATT AGTGTAGTTA ATACCAAAAG TAGTTCATAC TGATTACCGC CGAGAATAGA GTGCACTACA

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CTGTAACTTT AAGAAACTGA AATTGTGATT ACAGTATACG AAAGTTTAAT TATTAGGCTA TTTCAGACGA TTGTACACTG

1441 TTTCCAATTT TTTTCTTTTA CAAATTGCAG ACTTTTCAAC TCTTATTCCC TATTAAAACC CATCCATACT ATTCCTTGTT
AAAGGTTAAA AAAAGAAAAT GTTTAACGTC TGAAAAGTTG AGAATAAGGG ATAATTTTGG GTAGGTATGA TAAGGAACAA

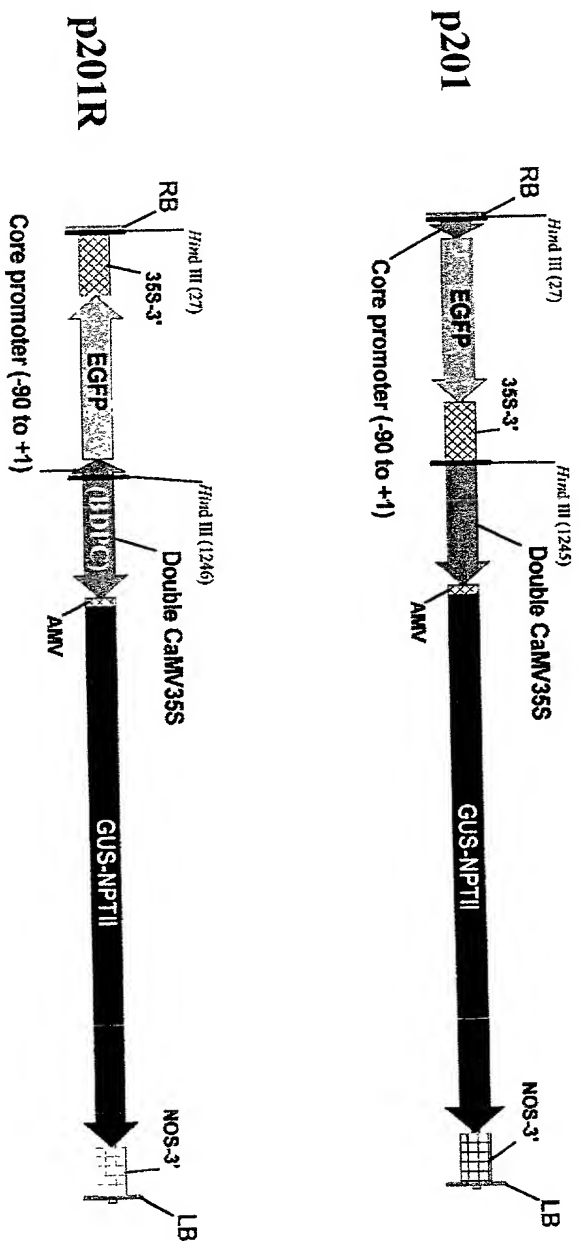
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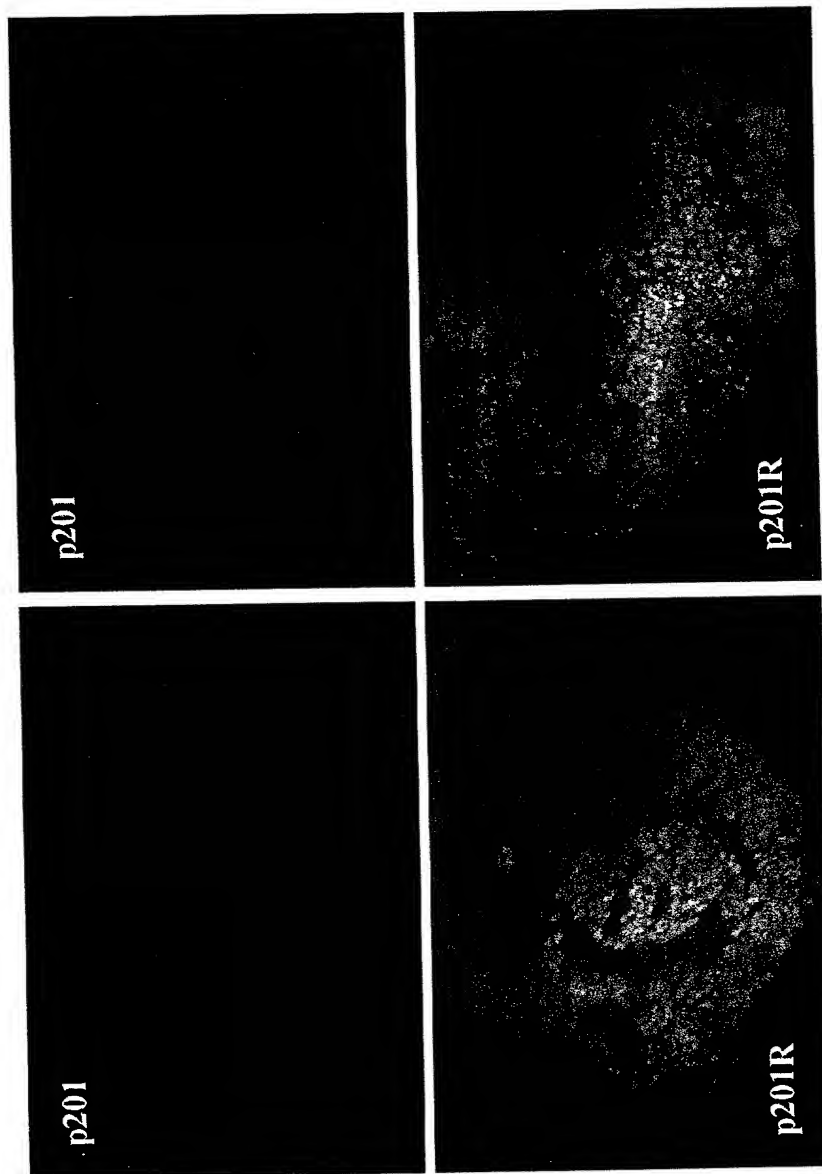
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AGAGTGGTTT TGGGTTTCC TAGG Seq. ID No. 12

10075105.021302

**Figure 13. Physical Map of T-DNA Region of Binary Vectors Containing a BDPC**

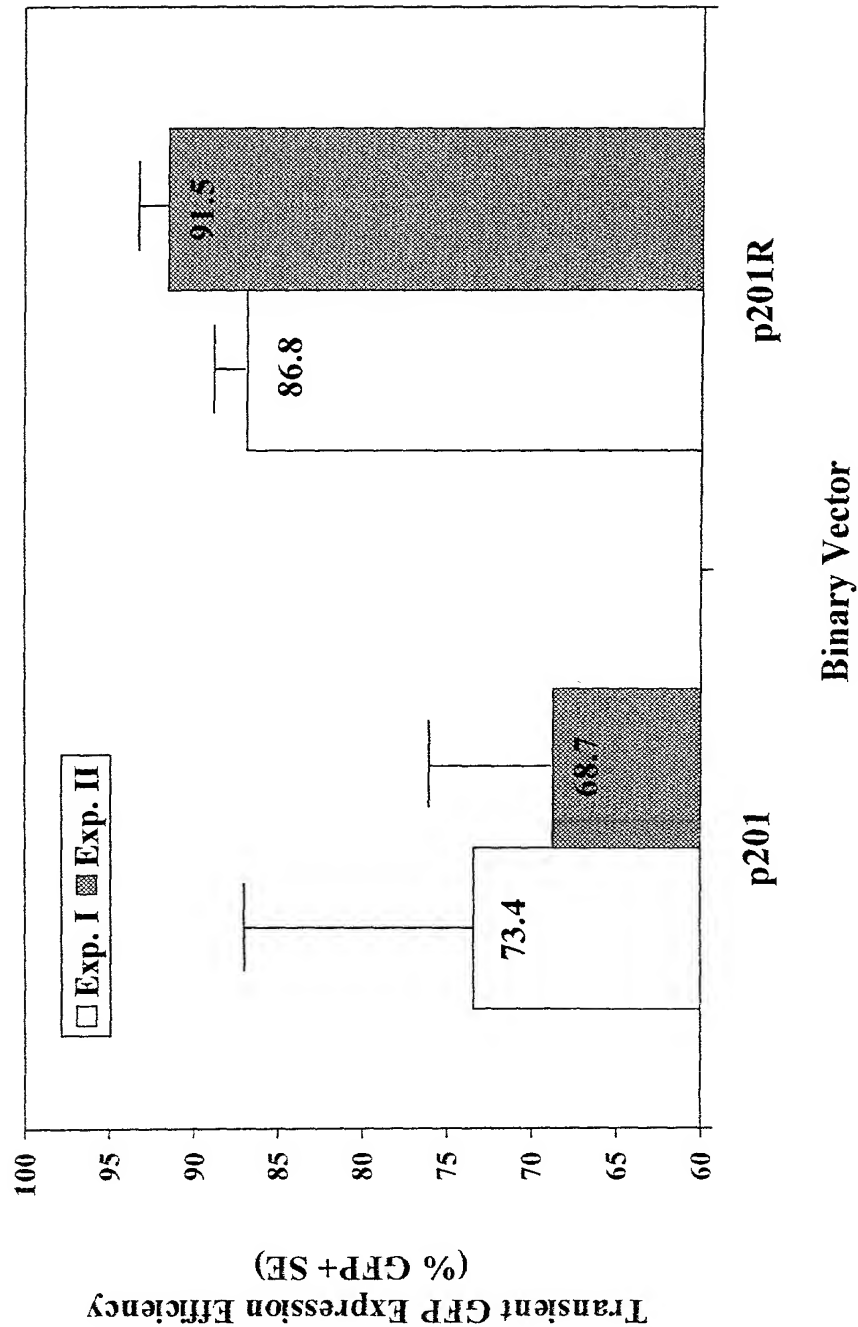


**Figure 14. Transient GFP Expression in Grape SE**  
*(Vitis vinifera* cv. Thompson Seedless) after Transformation  
 Using Binary Vectors p201 and p201R



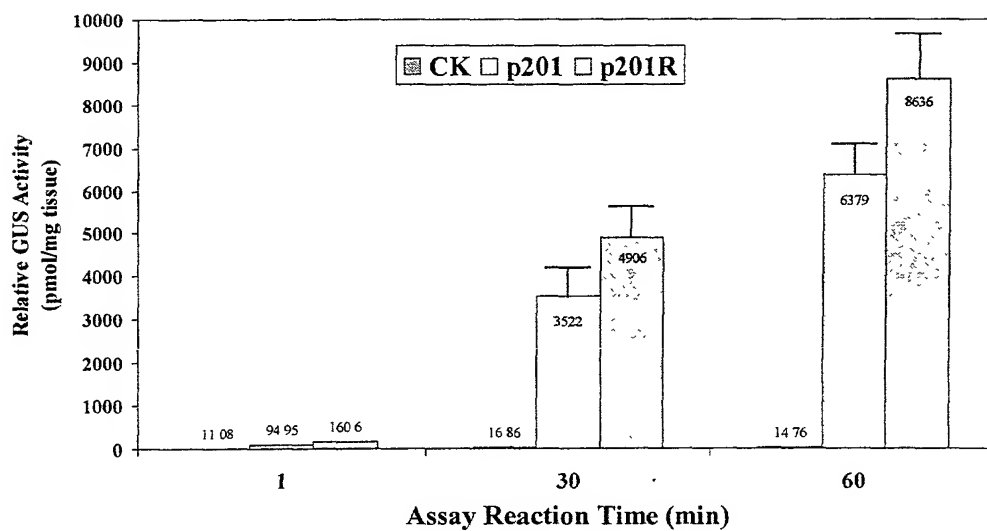


**Figure 15.** Transient GFP Expression Efficiency of Grape SE  
(*V. vinifera* cv. Thompson Seedless) after Transformation  
Using Binary Vectors p201 And p201R

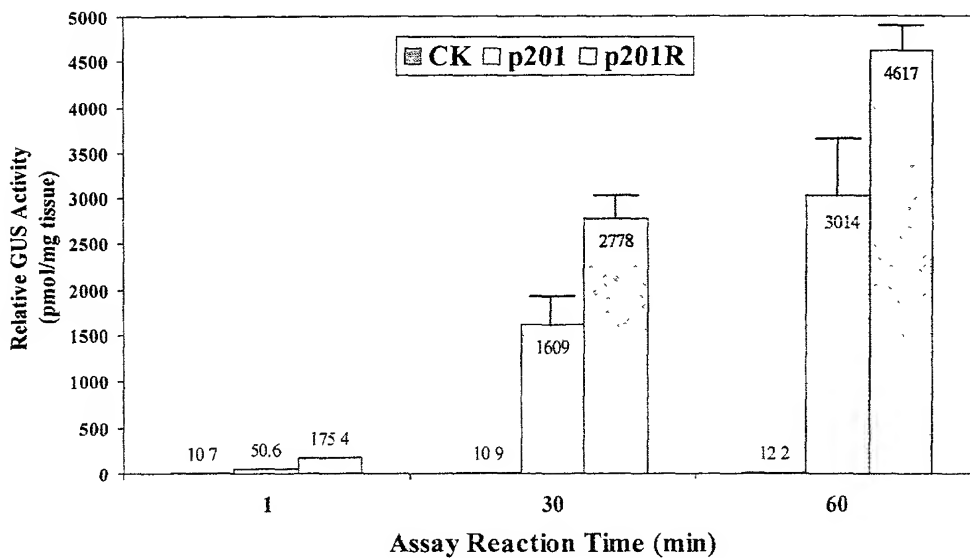


**Figure 16 Analysis of GUS Activity in Grape SE (*V. vinifera* cv. Thompson Seedless) after Transformation Using Binary Vectors p201 and p201R**

**Experiment I**



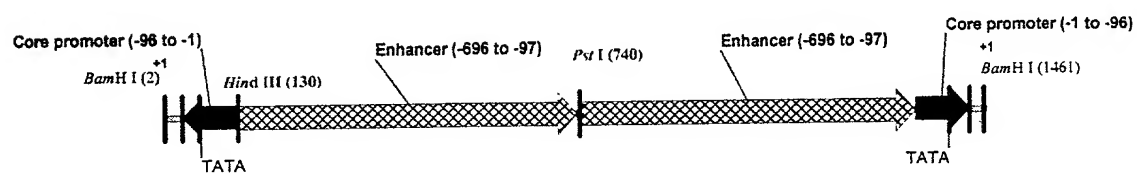
**Experiment II**



**Figure 17. GFP Expression in SE (A) and Leaf Tissues (B)  
of Transgenic Grape (*V. vinifera* cv. Thompson  
Seedless) Containing the T-DNA of p201R**



Fig. 18



BDPC with 2 enhancers based on At UBQ1 promoter

1465 bp

10075105.021305

Fig. 19

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1 GGATCCCTTT TGTGTTTCGT CTTCTCTCAC GTAGAAACCC TAAACAAGGA GGAGGCGGGT TTATATATGT CAATGTACGC
CCTAGGGAAA ACACAAAGCA GAAGAGAGTG CATCTTTGGG ATTTGTTCCCT CCTCCGCCCA AATATATACA GTTACATGCG

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81 GTCTAGGGTT TTGCTAATAT TGGGCTAGGT TACAGGCCTT TACCACAAAA GCTTAGTTGA TAAAAATATTT TTATTTGGTT  
CAGATCCCAA AACGATTATA ACCCGATCCA ATGTCCGGAA ATGGTGTTTT CGAATCAACT ATTTTATAAA AATAAACCAA

161 GTAATTTTGT AATATCCCGG GATATTTTAC AAATTGAACA TAGACTACAG AATTTTAGAA AACAACTTT CTCTCTCTTA  
CATTAAAAACA TTATAGGGCC CTATAAAGTG TTTAACTTGT ATCTGATGTC TTAAATCTT TTGTTTGAAA GAGAGAGAAT

241 TCTCACCTTT ATCTTTTAGA GAGAAAAAGT TCGATTTCCG GTTGACCGGA ATGTATCTTT GTTTTTTTTG TTTTGTAACA  
AGAGTGGAAA TAGAAAATCT CTCTTTTTC AAGCTAAAGGC CAACTGGCCT TACATAGAAA CAAAAAAAC AAAACATTGT

321 TATTTGTTTT TCCGATTTAG ATCGGATCTC CTTTTCCGTT TTGTCGGACC TTCTTCCGGT TTATCCGGAT CTAATAATAT  
ATAAAGCAAA AGGCTAAATC TAGCCTAGAG GAAAAGGCAA AACAGCCTGG AAGAAGGCCA AATAGGCCA GATTATTATA

401 CCATCTTAGA CTTAGCTAAG TTTGGATCTG TTTTTTGGTT AGCTCTTGTC AATCGCCTCA TCATCAGCAA GAAGGTGAAA  
GGTAGAATCT GAATCGATTC AAACCTAGAC AAAAAACCAA TCGAGAACAG TTAGCGGAGT AGTAGTCGTT CTTCCACTTT

481 TTTTGTACAA ATAAATCTTA GAATCATGTA GTGTCTTTGG ACCTTGGGAA TGATAGAAAC GATTTGTTAT AGCTACTCTA  
AAAACTGTT TATTTAGAAT CTTAGTACAT CACAGAAACC TGGAACCTT ACTATCTTTG CTAAACAATA TCGATGAGAT

561 TGTATCAGAC CCTGACCAAG ATCCAACAAT CTCATAGGTT TTGTGCATAT GAAACCTTCG ACTAACGAGA AGTGGTCTTT  
ACATAGTCTG GGACTGGTTC TAGGTTGTTA GAGTATCCAA AACACGTATA CTTTGGGAGC TGATTGCTCT TCACCAGAAA

641 TAATGAGAGA GATATCTAAA ATGTTATCTT AAAAGCCAC TCAATCTCA AGGCATAAGG TAGAAATGCA AATTTGGAAA  
ATTACTCTCT CTATAGATTT TACAATAGAA TTTTCGGGTG AGTTTAGAGT TCCGTATTC ATCTTTACGT TTAAACCTTT

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CACCCGACCC GGAAGACGTC AACTATTTTA TAAAAATAAA CCAACATTAA AACATTATAG GGCCCTATAA AGTGTTTAAAC

801 AACATAGACT ACAGAATTTT AGAAAACAAA CTTTCTCTCT CTTATCTCAC CTTTATCTTT TAGAGAGAAA AAGTTCGATT
TTGTATCTGA TGTCTTAAAA TCTTTTGTGTT GAAAGAGAGA GAATAGAGTG GAAATAGAAA ATCTCTCTTT TTCAAGCTAA

881 TCCGGTTGAC CGGAATGTAT CTTTGTGTTTT TTTGTTTTGT AACATATTTT GTTTTCCGAT TTAGATCGGA TCTCCTTTTC
AGGCCAACTG GCCTTACATA GAAACAAAAA AAACAAAACA TTGTATAAAG CAAAAGGCTA AATCTAGCCT AGAGGAAAAG

961 CGTTTTGTG GACCTTCTTC CGGTTTATCC GGATCTAATA ATATCCATCT TAGACTTAGC TAAGTTTGGG TCTGTTTTTT
GCAAAACAGC CTGGAAGAAG GCCAAATAGG CCTAGATTAT TATAGGTAGA ATCTGAATCG ATTCAAACCT AGACAAAAAA

1041 GGTTAGCTCT TGTCAATCGC CTCATCATCA GCAAGAAGGT GAAATTTTGT ACAAATAAAT CTTAGAATCA TGTAGTGTCT
CCAATCGAGA ACAGTTAGCG GAGTAGTAGT CGTTCTTCCA CTTTAAAAAC TGTTTATTTA GAATCTTAGT ACATCACAGA

1121 TTGGACCTTG GGAATGATAG AAACGATTTG TTATAGCTAC TCTATGTATC AGACCCTGAC CAAGATCCAA CAATCTCATA
AACCTGGAAC CTTTACTATC TTTGCTAAAC AATATCGATG AGATACATAG TCTGGGACTG GTTCTAGGTT GTTAGAGTAT

1201 GGTTTTGTGC ATATGAAACC TTCGACTAAC GAGAAGTGGT CTTTAAATGA GAGAGATATC TAAATGTGA TCTTAAAGC
CCAAACACG TATACTTTGG AAGCTGATTG CTCTTACCA GAAATTAAT CTCTCTATAG ATTTTACAAT AGAATTTTCG

1281 CCACTCAAAT CTCAAGGCAT AAGGTAGAAA TGCAAATTTG GAAAGTGGGC TGGGCCTTTT GTGGTAAAGG CCTGTAACCT
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10075105-021302

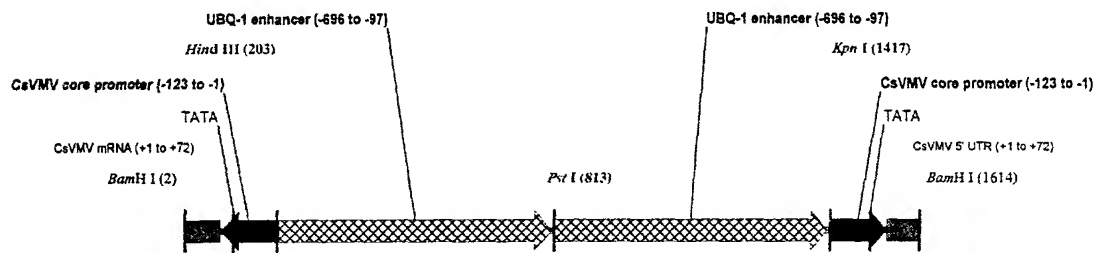
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TCGGGTTATA ATCGTTTTGG GATCTGCGCA TGTAAGTGT TATATTGGG CGGAGGAGGA ACAAATCCCA AAGATGCACT

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1441 GAGAAGACGA AACACAAAAG GATCC Seq. ID No. 13  
CTCTTCTGCT TTGTGTTTTC CTAGG Seq. ID No. 14  
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1005105 02430

Fig. 20



Heterologous BDPC with 2 UBQ-1 enhancers and 2 CsVMV core promoters

1618 bp

Fig. 21

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1 GGATCCACAA ACTTACAAAT TTCTCTGAAG TTGTATCCTC AGTACTTCAA AGAAAATAGC TTACACCAAA TTTTCTCTTG
CCTAGGTGTT TGAATGTTTA AAGAGACTTC AACATAGGAG TCATGAAGTT TCTTTTATCG AATGTGGTTT AAAAAAGAAC

81 TTTTCACAAA TGCCGAACCTT GGTTCCTTAT ATAGGAAAAC TCAAGGGCAA AAATGACACG GAAAAATATA AAAGGATAAG
AAAAGTGTTT ACGGCTTGAA CCAAGGAATA TATCCTTTTG AGTTCCCGTT TTTACTGTGC CTTTTATAT TTTCTATTC

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161 TAGTGGGGGA TAAGATTCTT TTGTGATAAG GTTACTTTCC GAAGCTTAGT TGATAAAATA TTTTATTTTG GTTGTAATTT  
ATCACCCCTT ATTCTAAGGA AACACTATTC CAATGAAAGG CTTCGAATCA ACTATTTTAT AAAAAATAAC CAACATTAAA

241 TGTAATATCC CGGGATATTT CACAAATTGA ACATAGACTA CAGAATTTTA GAAAAACAAAC TTTCTCTCTC TTATCTCACC  
ACATTATAGG GCCCTATAAA GTGTTTAACT TGTATCTGAT GTCTTAAAT CTTTTGTTTG AAAGAGAGAG AATAGAGTGG

321 TTTATCTTTT AGAGAGAAAA AGTTCGATTT CCGGTTGACC GGAATGTATC TTGTTTTTTT TTGTTTTGTA ACATATTTTCG  
AAATAGAAAA TCTCTCTTTT TCAAGCTAAA GGCCAACCTG CCTTACATAG AAACAAAAA AACAAAACAT TGTATAAAGC

401 TTTTCCGATT TAGATCGGAT CTCCTTTTCC GTTTGTGCGG ACCTTCTTCC GGTTTATCCG GATCTAATAA TATCCATCTT  
AAAAGGCTAA ATCTAGCCTA GAGGAAAAGG CAAAACAGCC TGAAGAAGG CCAATAGGC CTAGATTATT ATAGGTAGAA

481 AGACTTAGCT AAGTTTGGAT CTGTTTTTTG GTTAGCTCTT GTCAATCGCC TCATCATCAG CAAGAAGGTG AAATTTTTGA  
TCTGAATCGA TTCAAACCTA GACAAAAAAC CAATCGAGAA CAGTTAGCGG AGTAGTAGTC GTTCTTCCAC TTTAAAAACT

561 CAAATAAATC TTAGAATCAT GTAGTGTCTT TGGACCTTGG GAATGATAGA AACGATTTGT TATAGCTACT CTATGTATCA  
GTTTATTTAG AATCTTAGTA CATCACAGAA ACCTGGAACC CTTACTATCT TTGCTAAACA ATATCGATGA GATACATAGT

641 GACCCTGACC AAGATCCAAC AATCTCATAG GTTTGTGCGA TATGAAACCT TCGACTAACG AGAAGTGGTC TTTAATGAG  
CTGGGACTGG TTCTAGGTTG TTAGAGTATC CAAAACAGT ATACTTTGGA AGCTGATTGC TCTTACCAG AAAATTACTC

721 AGAGATATCT AAAATGTTAT CTTAAAAGCC CACTCAAATC TCAAGGCATA AGGTAGAAAT GCAAAATTTGG AAAGTGGGCT  
TCTCTATAGA TTTTACAATA GAATTTTCGG GTGAGTTTAG AGTTCCGTAT TCCATCTTTA CGTTTAAACC TTTCAACCGA

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801 GGGCCTTCTG CAGTTGATAA AATATTTTTA TTTGGTTGTA ATTTTGTAAT ATCCCGGGAT ATTTACAAA TTGAACATAG
CCCGAAGAC GTCAACTATT TTATAAAAT AAACCAACAT TAAACATTA TAGGGCCCTA TAAAGTGTTT AACTTGTATC

881 ACTACAGAAT TTTAGAAAAC AAATTTTCTC TCTCTTATCT CACCTTTATC TTTTAGAGAG AAAAAGTTTCG ATTTCCGGTT
TGATGTCTTA AAATCTTTTG TTTGAAAGAG AGAGAATAGA GTGGAAATAG AAAATCTCTC TTTTCAAGC TAAAGGCCAA

961 GACCGGAATG TATCTTTGTT TTTTGTGTTT TGTAACATAT TCGTTTTTCC GATTTAGATC GGATCTCCTT TTCCGTTTTG
CTGGCCTTAC ATAGAAACAA AAAAAACAA ACATTGTATA AAGCAAAAGG CTAATCTAG CCTAGAGGAA AAGGCAAAAC

1041 TCGGACCTTC TTCCGGTTTA TCCGGATCTA ATAATATCCA TCTTAGACTT AGCTAAGTTT GGATCTGTTT TTTGGTTAGC
AGCCTGGAAG AAGGCCAAAT AGGCCTAGAT TATTATAGGT AGAATCTGAA TCGATTCAA CCTAGACAAA AAACCAATCG

1121 TCTTGTCAT CCGCTCATCA TCAGCAAGAA GGTGAAATTT TTGACAAATA AATCTTAGAA TCATGTAGTG TCTTTGGACC
AGAACAGTTA GCGGAGTAGT AGTCGTTCTT CCACTTTAAA AACTGTTTAT TTAGAATCTT AGTACATCAC AGAAACCTGG

1201 TTGGGAATGA TAGAAACGAT TTGTTATAGC TACTCTATGT ATCAGACCCT GACCAAGATC CAACAATCTC ATAGGTTTTG
AACCCTTACT ATCTTTGCTA AACAATATCG ATGAGATACA TAGTCTGGGA CTGGTTCTAG GTTGTTAGAG TATCCAAAAC

1281 TGCATATGAA ACCTTCGACT AACGAGAAGT GGTCTTTTAA TGAGAGAGAT ATCTAAAATG TTATCTTAAA AGCCCACTCA
ACGTATACTT TGGAAGCTGA TTGCTCTTCA CCAGAAAATT ACTCTCTCTA TAGATTTTAC AATAGAATTT TCGGGTGAGT

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TTAGAGTTCC GTATTCCATC TTTACGTTTA AACCTTTCAC CCGACCCGGA ACCATGGGCC TTTCATTGGA ATAGTGTTC

1441 GAATCTTATC CCCCACTACT TATCCTTTTA TATTTTTCG TGTCATTTT GCCCTTGAGT TTCCTATAT AAGGAACCAA  
CTTAGAATAG GGGGTGATGA ATAGGAAAAT ATAAAAGGC ACAGTAAAA CGGGAACCTCA AAAGGATATA TTCCTTGGTT

1521 GTTCGGCATT TGTGAAAACA AGAAAAAATT TGGTGTAAGC TATTTCTTT GAAGTACTGA GGATACAACT TCAGAGAAAT  
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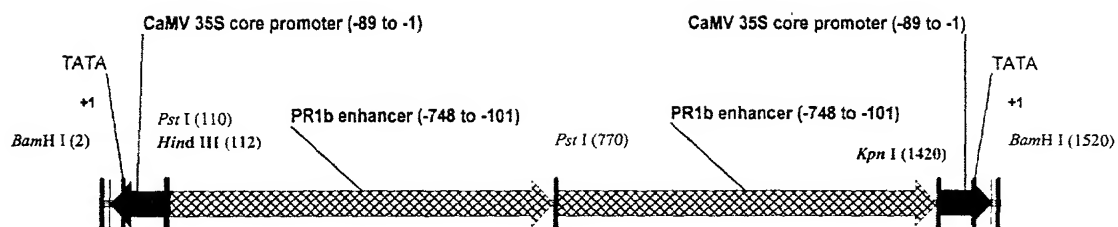
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1601 TTGTAAGTTT GTGGATCC Seq. ID No. 15
AACATTCAAA CACCTAGG Seq. ID No. 16

1003405.02130

Fig. 22



Heterologous BDPC with 2 PR1b enhancers and 2 CaMV 35S core promoters

1524 bp

Fig. 23

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1 GGATCCAGCG TGTCCTCTCC AAATGAAATG AACTTCCTTA TATAGAGGAA GGGTCTTGCG AAGGATAGTG GGATTGTGCG
CCTAGGTCGC ACAGGAGAGG TTTACTTTAC TTGAAGGAAT ATATCTCCTT CCCAGAACGC TTCCTATCAC CCTAACACGC

PstI HindIII

81 TCATCCCTTA CGTCAGTGGA GATACTGCAG AAGCTTCAGA CTCATTAACT TAAAAGAAGA TATAGACTCA TTAACCTAAA
AGTAGGGAAT GCAGTCACCT CTATGACGTC TTCGAAGTCT GAGTAATTGA ATTTTCTTCT ATATCTGAGT AATTGAATTT

161 AGAAGATATA GATTCCAACA CAAGTTCAAA ATTCATAAAC GTCAATCTTG GCTAAATTTT TGAACATCAA TGCAATCCTT
TCTTCTATAT CTAAGGTTGT GTTCAAGTTT TAAGTATTTG CAGTTAGAAC CGATTAAAG ACTTGTAGTT ACGTAAGGAA

241 TAAAATATAG ATAATAAGTT AGGATGTTGT CACTTTCTTA AAGCATATTC CGACTGAGTC TGGTAGAATC TCATAAACTT
ATTTTATATC TATTATTCAA TCCTACAACA GTGAAAGAAT TTCGTATAAG GCTGACTCAG ACCATCTTAG AGTATTTGAA

321 TAGGCCTTAT CTCTTCAATT AGGCAATTAC TTACCTCCGC TCTACTTTAA GAAAATTCAA TGGAGTACAC CATTATTAAG
ATCCGGAATA GAGAAGTTAA TCCGTTAATG AATGGAGGCG AGATGAAATT CTTTAAAGTT ACCTCATGTG GTAATAATTC

401 TTCATATAAA AATAAAATTA TATTAATTCT GTCTCTTGTT GGTTCGCTCT ATCTTTTTCT GTTTTCCTGC TTCAACCATA
AAGTATATTT TTATTTTAAT ATAATTAAGA CAGAGAACAA CCAAGCGAGA TAGAAAAAGA CAAAAGGACG AAGTTGGTAT

481 ACATATACAA GAACTACATT TTCCAAGCTA GATATATCTA ACATGACTGA CTTTGTAAT TTCTTTTGCC AAGTTAAAGA
TGTATATGTT CTTGATGTAA AAGGTTGAT CTATATAGAT TGTACTGACT GAAACATTTA AAGAAAACGG TTCAATTTCT

561 AAAAAAATGA TGTATCCAA ATAATAAGA GAAAGAGCCC TAATGAAAAA AATGATTTAC TATTAGAGTT GTTCAGCTAA
TTTTTTTACT ACAATAGGTT TATTATTTCT CTTTCTCGGG ATTACTTTTT TACTAAATG ATAATCTCAA CAAGTCGATT

641 TCACATCAAT TATGGTTTTT ATCAAGTATG ACTAATGGCG GCTCTTATCT CACGTGATGT GACATTGAAA TTCTTTGACT
AGTGTAGTTA ATACCAAAAG TAGTTCATAC TGATTACCGC CGAGAATAGA GTGCACTACA CTGTAACCTT AAGAAACTGA

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721 TTAACACTAA TGTCATATGC TTTCAAATTA ATAATCCGAT AAAGCTGCAG ACTCATTAAC TAAAAGAAG ATATAGACTC
AATTGTGATT ACAGTATACG AAAGTTAAT TATTAGGCTA TTTGACGTC TGAGTAATTG AATTTTCTTC TATATCTGAG

801 ATTAACCTAA AAGAAGATAT AGATTCCAAC ACAAGTTCAA AATTCATAAA CGTCAATCTT GGCTAAATTT CTGAACATCA
TAATTGAATT TTCTTCTATA TCTAAGGTTG TGTTCAGTT TTAAGTATTT GCAGTTAGAA CCGATTTAAA GACTTGTAGT

881 ATGCATTCCT TTAAAATATA GATAATAAGT TAGGATGTTG TCACTTTCTT AAAGCATATT CCGACTGAGT CTGGTAGAAT
TACGTAAGGA AATTTTATAT CTATTATTCA ATCCTACAAC AGTGAAAGAA TTTCGTATAA GGCTGACTCA GACCATCTTA

961 CTCATAAACT TTAGGCCTTA TCTCTTCAAT TAGGCAATTA CTTACCTCCG CTCTACTTTA AGAAAATTCA ATGGAGTACA
GAGTATTTGA AATCCGGAAT AGAGAAGTTA ATCCGTTAAT GAATGGAGGC GAGATGAAAT TCTTTTAAAG TACCTCATGT

1041 CCATTATTAA GTTCATATAA AAATAAAATT ATATTAATTC TGTCTCTTGT TGGTTTCGCTC TAATTTTTTC TGTTTTCTTG
GGTAATAATT CAAGTATATT TTTATTTTAA TATAATTAAG ACAGAGAACA ACCAAGCGAG ATAGAAAAAG ACAAAGGAC

1121 CTTCAACCAT AACATATACA AGAACTACAT TTTCCAAGCT AGATATATCT AACATGACTG ACTTTGTAAA TTTCTTTTGC
GAAGTTGGTA TTGTATATGT TCTTGATGTA AAAGGTTTCA TCTATATAGA TTGTACTGAC TGAAACATTT AAAGAAAACG

1201 CAAGTTAAAG AAAAAAATG ATGTTATCCA AATAATAAAG AGAAAGAGCC CTAATGAAAA AAATGATTTA CTATTAGAGT
GTTCAATTTT TTTTTTTTAC TACAATAGGT TTATTATTTT TCTTTCTCGG GATTACTTTT TTTACTAAAT GATAATCTCA

1281 TGTTCAAGTA ATCACATCAA TTATGGTTTT CATCAAGTAT GACTAATGGC GGCTCTTATC TCACGTGATG TGACATTGAA
ACAAGTCGAT TAGTGTAGTT AATACCAAAA GTAGTTCATA CTGATTACCG CCGAGAATAG AGTGCATAC ACTGTAACTT

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1361 ATTCTTTGAC TTAAACACTA AIGTCATATG CTTTCAAATT AATAATCCGA TAAAGGTACC TATCTCCACT GACGTAAGGG  
TAAGAAACTG AAATTGTGAT TACAGTATAC GAAAGTTTAA TTATTAGGCT ATTTCCATGG ATAGAGGTGA CTGCATTCCC

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1441 ATGACGCACA ATCCCACTAT CCTTCGCAAG ACCCTTCCTC TATATAAGGA AGTTCATTTT ATTTGGAGAG GACACGCTGG  
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BamH

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1521 ATCC Seq. ID No. 17
TAGG Seq. ID No. 18

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Figure 24 . Physical Map of T-DNA Region of CaMV 35S Promoter-derived Binary Vectors Containing a BDPC

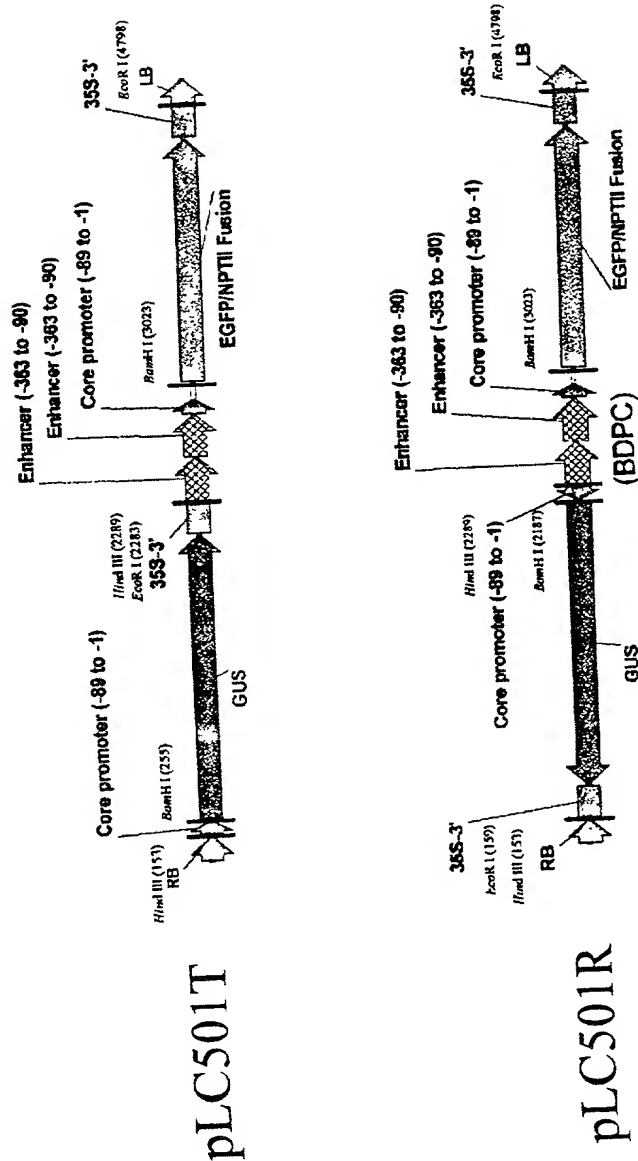


Figure 25. Analysis of GUS Activity in Grape SE (*V. vinifera* cv. Thompson Seedless) after Transformation Using Three Binary Vectors

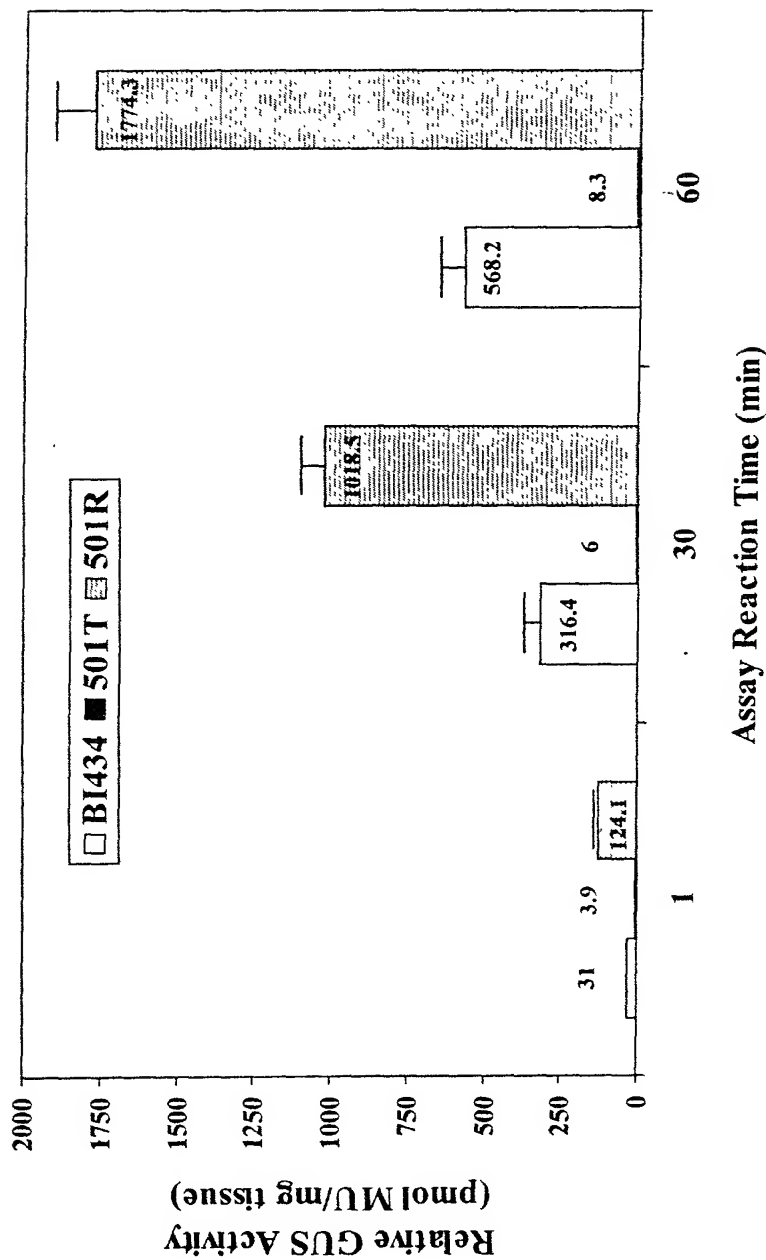


Figure 26. Physical Map of T-DNA Region of Transformation Vectors with 4-Enhancer-Containing BDPC

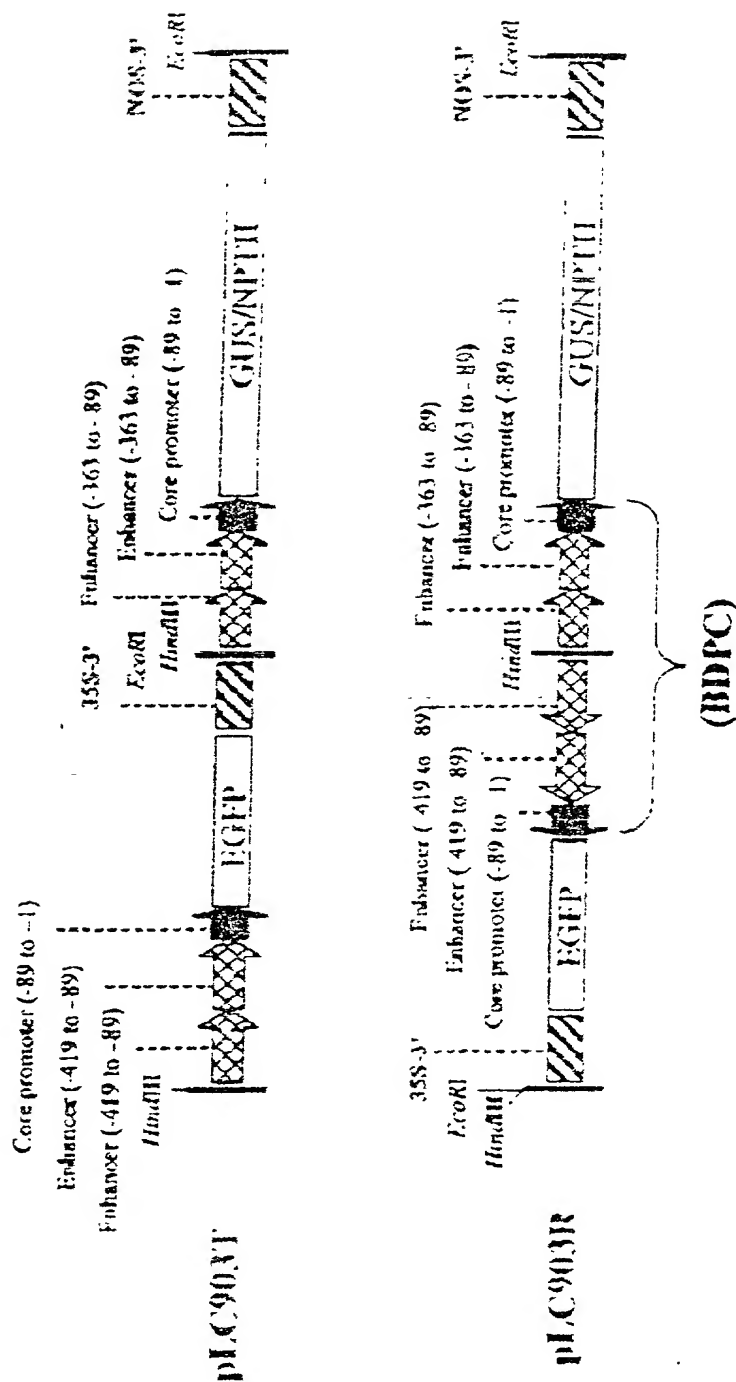


Figure 27. Analysis of GUS Activity in SE (*K. vinifera* cv. Thompson Seedless) after transformation Using Three Binary Vectors

